The WOOD DUCK

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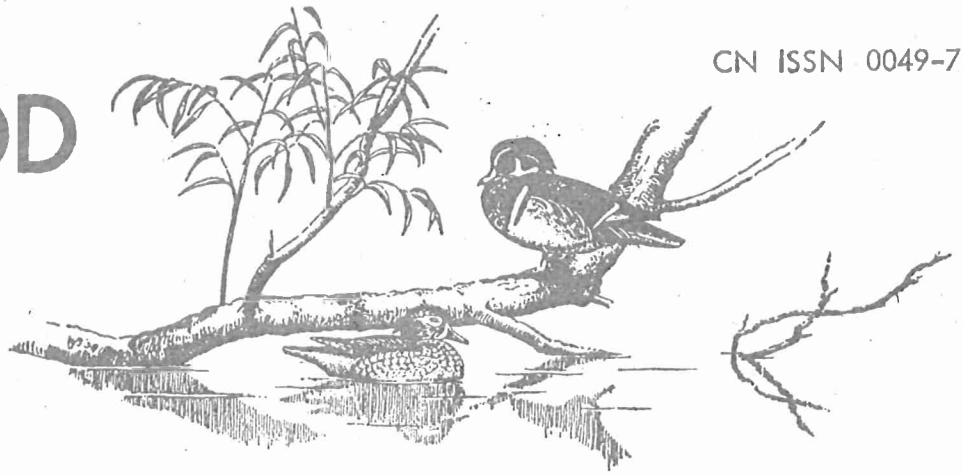

HAMILTON NATURALISTS' CLUB

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What's for Dinner?

...or Waiter, there's something stridulating in my soup!

by Brian Pomfret

Are you tired of being eaten alive by mosquitoes? Bothered by beetles shredding your prize begonias? Livid over the depredations of larvae in your lawn? Well, put the bite on *them!* Eat the insects that are eating you and your plants. A palatable (and nutritious) form of revenge.

Although many people consider eating insects (known as entomophagy) to be in bad taste, archaeological evidence indicates that this has been practised since humankind first evolved. Throughout history there are records of people from all walks of life consuming insect delicacies, and even today they remain an important food source for many cultures.

Ancient records contain many references to entomophagy. In the Old Testament, Leviticus 11:20–23 sets out which insects may be eaten in the Mosaical diet. The author of Leviticus was not much of an entomologist, however, as this piece repeatedly states that insects have four legs.

Ancient Greek literature records locusts and cicadas being eaten by both the rich and poor. In ancient Rome a prized dish was gilded, honeyed locusts. The gourmet Lucullus fed stag beetle larvae on wine and bran before roasting them.

Medicinally, ancient Greek and Roman physicians prescribed bedbugs as a cure for everything from fevers to bed–wetting. Ground dried cockroaches were also a popular cure for various ailments, and may still be found in use today.

Insects are still eaten by many people today, providing a vital source of nutrition. Tom McRae, Chief Scientific Officer for the University of Queensland recounts his experiences in northern Ghana during the 1960s.

"With the onset of the rains, in April, the farmers must start preparing the soil for planting their early millet (sorghum) crop. At this time most of them are weak from malnutrition as no staple crops can grow between October and the onset of the rains. The first downpours stimulate winged termites to emerge from their underground colonies in huge numbers and thousands of these are collected and either fried, or roasted and ground into flour.

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Proteins, fats, and vitamins thus obtained help a malnourished population to complete the arduous farm labour of the early rains.

Without this annual outpouring of termites the situation in many areas would be disastrous."

In East Africa termites are considered to be so important that their mounds are often claimed by specific individuals, and are passed down from generation to generation. Crickets and grasshoppers are also popular; either roasted and eaten whole, or ground into a flour.

Insects are a normal part of many Asian diets. Filipino farmers flood their fields to capture mole crickets, which are cooked in a variety of different ways.

In Thailand a wide variety of insects are consumed, including crickets, grasshoppers, beetle larvae, and dragonflies. Baskets of giant predacious bugs known as water scorpions can be found in Thai markets. An extract from this bug's abdominal glands is used to flavour many dishes.

The father of European entomophagy must be V.M. Holt, an eccentric Englishman who privately published "WHY NOT EAT INSECTS?" in 1885. Holt's hypothesis was that England's starving peasantry would be adequately fed if they forsook their traditional fare in favour of caterpillars, beetles, and other insects found in the fields. This would also provide effective pest control.

The recipes in his book include slugs, snails, and earthworms. Some specialties are sole in woodlouse sauce, and curried beetles.

In reality we all eat insects regularly, whether we wish to or not. Canned and bottled vegetable products are seldom free from insect material. Most countries have regulations stating the maximum permitted insect content in such products. For example the best of the processor's tomato crop will be canned, but fruits showing insect damage are made into tomato paste or ketchup.

Insects are still eaten by many people in the world today, providing a source of nutrition

Stored cereals also have their permitted quota of insects, which have been ground up with the grain into flour for millennia. The Aztecs actually preferred ears of maize infested with caterpillars to those without.

The food colouring cochineal is extracted from the crushed bodies of scale insects that feed on prickly pear.

The true potential of insects as a source of human food remains unexplored. Most armed forces instruct their members in entomophagy as a survival technique, but this has not caught on in other sectors of society.

Commercially, insects can be cultured cheaply, in large numbers, and in relatively small spaces. They are rich in protein and vitamins and have amazing potential as a source of food for famine–ridden areas of the world.

Are insects the food of the future? That remains to be seen. They will undoubtably remain a food source in those cultures that have been eating them since time immemorial, but may just remain a novelty elsewhere. Attitudes change quickly, however, especially among those who are hungry. It may not be too long before you find mealworm icing on your birthday cake.

For the adventurous intrigued enough to try entomophagy, a few words of caution. There is a danger that wild caught insects may be toxic. Some herbivorous insects store toxic defense compounds produced by their host plants. Eating them could prove harmful. Care should also be taken to avoid insects contaminated with pesticides. When in doubt, don't.

Commercially produced insects are probably the safest choice. They can be purchased from pet stores and biological supply dealers.

A Recipie to Try

Banana Worm Bread

½ cup shortening
1 teaspoon salt
¾ cup sugar
½ cup chopped nuts
2 bananas, mashed
2 eggs
2 cups flour
¼ cup dry–roasted army worms, *Heliothis* larvae, or mealworms
1 teaspoon baking soda

Mix together all ingredients. Bake in greased loaf pan at 350° F for about 1 hour.

Special thanks go to Dr. Tom McRae and Iowa State University.

Temagami:

Just when you thought this old–growth forest had been protected...

by Jocelyn Neysmith

No doubt you remember the impassioned protesters' road blockades across Red Squirrel Road, which leads into the core wilderness area of Temagami, in 1989. Hundreds of the natives and other concerned Canadians who drew attention to the plight of the spectacular old–growth white pine forests of Temagami were arrested for their efforts.

At the time, the Ontario government's response to the political pressure and civil disobedience was a positive one. A joint First Nation–Ontario government Stewardship Authority was charged with the management of the most controversial wild areas, land–claim negotiations began with the Teme–Augama Anishnaibi aboriginal people, and a process to develop a land–use plan for the future of the area was initiated.

The threat renewed

But for those of us who assumed that Temagami was now a protected forest, there is a rude awakening in store: *the threat to this majestic wilderness area is more menacing than ever.* The joint First Nation–Ontario Wendaban Stewardship Authority has been disbanded, and the land–claims negotiations have come to a standstill.

Recently, I attended an open forum on the issue held by the University of Guelph's OPIRG (Ontario Public Interest Research Group), at which representatives from the Wildlands League and the Teme–Augama Anishnaibi people spoke (Ministry of Natural Resources and industry reps, though invited, failed to show). The activists present had much to say about the Temagami wilderness area — and none of it encouraging. This article is based on "Temagami: One Last Chance", a joint publication of the Wildlands League, Northwatch, Earthroots, Friends of Temagami and the Temiskaming Environmental Action Committee. (For additional information on these groups, please visit the Conservation Table at the March Club meeting.)

The current situation

In June 1994, the Ontario government's Comprehensive Planning Council (CPC) put forth three map options, for public consultation, on the future of the wilderness areas of Temagami. The most ecologically sensitive map included the protection of the Lady Evelyn River watershed (the river running through the heart of the wilderness park), the old–growth pine forests, the unique plant and animal habitats, the representative landforms, and the region's recreational waterways. On December 22, 1995, the draft plan for the future of Temagami was released by the CPC. Their proposal protects 50% less of the area than the most ecologically sensitive map option. If the Teme–Augama Anishnaibi land claim is rejected, the 23–year freeze on mineral exploration and development could be lifted.

Temagami is now threatened with imminent industrial development, including gold and open–pit copper mining, logging, and road and bridge construction. According to the CPC plan, open pit mines may be opened at the headwaters of the Lady Evelyn River, and logging and mining will take place up to the boundary of Lady Evelyn–Smoothwater Park. The area surrounding Lake Temagami, one of the highest quality lake trout fisheries left in Ontario, will be open for

industrial activity. Perhaps most significant of all, a staggering 58% of Temagami's remaining old–growth pine stands will be opened to logging. This is truly a tragedy, when you consider that the Temagami stands represent 33% of the old–growth pine forests left in North America, and we have had little success in attempting regrowth of these splendid ecosystems.

An alternative vision

Fortunately, there is a ray of hope. The groups mentioned above, who authored "Temagami: One Last Chance", have proposed an alternative, the **Future for Temagami Plan.** This plan includes a proposed Wildland Reserve which expands the protected areas to conserve the integrity and biodiversity of the wilderness. This involves the protection of the Lady Evelyn River headwaters, as well as the lakes and waters of watersheds which drain into the park; the protection of the old–growth red and white pines; the protection of sites of ecological value such as the sugar maple forests of Cliff Lake; preservation of the key areas where educational and recreational activities take place; and allowances for ecologically sensitive resource extraction.These initiatives accomplish the goals of the Endangered Spaces Campaign for the Temagami natural region.

The plan also provides an outline for an independent Temagami Forest Authority which would act as the resource steward upon completion of the land–use plan. Its duties would include developing local value–added forestry jobs, and promoting the vast eco–tourism and fishing opportunities that exist in the Temagami area.

What you can do!

One of North America's last remnant old–growth pine forest ecosystems is under imminent threat of degradation, and the citizens of Ontario must voice their opinions on this distressing prospect. It is very important that you inform MNR Minister Chris Hodgson of your concerns regarding the mining and logging activity proposed for the Temagami wilderness area. A form letter will be available on the Conservation table at the March meeting which you can sign and send to Minister Hodgson. However, we encourage you to write your own letter as one personal letter has far more impact, and is given more weight, than several form letters.

Please write to the address below and ask The Honourable Chris Hodgson, Minister of Natural Resources, to reject the CPC plan for land use in Temagami. Encourage him to implement sustainable protection measures for this rare and sensitive ecosystem. Tell Mr. Hodgson that it is crucial that he take immediate action on this issue before the development and destruction begin, and that you are awaiting news of his progress.

Please write to:
The Honourable Chris Hodgson
Minister of Natural Resources
6th Floor, Whitney Block
99 Wellesley St. W.
Toronto, ON M7A 1W3

or Fax: 416–314–1601

The Bats of Ontario

by Sandy Dobbyn

A bat survey was carried out in July and August in the Red Hill Valley as part of the biological inventory being conducted there by the HNC. The study was done by Sandy Dobbyn, author of the *Atlas of the Mammals of Ontario,* using mist nets, tuttle traps and electronic bat detectors and confirmed the presence of at least four species of bats – Hoary Bat, Red Bat, Big Brown Bat and Northern Long–eared Bat. A total of 135 records from 54 locations were made in the seven nights of field work. These included four records of unidentified *Myotis* species which could possibly have been Little Brown Bats.

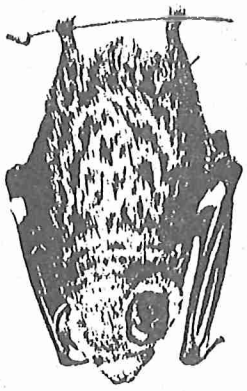
The final report on the study includes summaries of the eight species of bats found in Ontario. The Red Hill Valley bat survey sought to determine which of Ontario's eight bat species are resident in the valley during the summer. A variety of field methods were used to increase the odds of capturing all of the species that are present. Determining which methods to use depended on some background information on the life histories of each of the eight species. Knowledge of a bat's preferred habitat and prey can assist in determining how to capture it, and knowledge of the physical characteristics of each species will assist in identifying a bat when captured....A summary of the life history of each species follows and includes a description of the bat including its general appearance, physical measurements (i.e., weight, forearm, hind foot, and ear

measurements), preferred habitats (including foraging habitat and roosting locations), wintering strategy, and other relevant information.

Species Summaries

Eastern Small–footed Bat. *Myotis leibii* (Audubon and Bachman).
The Eastern Small–footed Bat is Ontario's smallest bat and is characterised by glossy, dark–brown fur on its back and lighter, buffy coloured fur below. It has an average weight of 3.8 g, forearm length of 32.2 mm (not more than 34 mm), ear length of 18.5 mm, hind foot length of 9.1 mm, and a slightly keeled calcar (van Zyll de Jong 1985). It has the most limited distribution of all the Ontario species (Peterson 1966), being restricted to the north–eastern United States and southern Ontario and Quebec (Peterson 1966, van Zyll de Jong 1985). In Ontario, it is most commonly found in the southern portions of the province, south of the north shore of Georgian Bay (Dobbyn 1994). A small number of individuals have been recorded at hibernacula in August at Webbwood and Alona Bay but have not been found in these areas during the rest of the year (Fenton 1972).

The habitat of the Eastern Small–footed Bat is not clearly understood. However, since its overall range in North America approximates the distribution of Carolinian Forest, it may be dependent on that type of forest habitat. This species remains in Ontario throughout the year and hibernates in caves and abandoned mines (Fenton 1972). It is not generally found in buildings, using natural roosting locations instead. Food habits of this bat are also unknown (van Zyll de Jong 1985) but likely include insects smaller than those consumed by the Little Brown Bat (3–10 mm).



HOARY BAT

Northern Long–eared Bat. *Myotis septentrionalis* (Trouessart).
The Northern Long–eared Bat was, until recently, considered conspecific with Keen's Long–eared Bat, *Myotis keenii* (Merriam). However, the species was split based upon noted morphological differences between the western and eastern forms (van Zyll de Jong 1979). The distribution of the Northern Long–eared Bat extends from eastern British Columbia and the southern Northwest Territories to Newfoundland, and from Moosonee to Florida (van Zyll de Jong 1985). In Ontario, it has been recorded from the southern parts of the province, north along the shores of Lake Superior to Nipigon, and as far north as Moosonee. A few confirmed records exist for the Hamilton–Wentworth area (Dobbyn 1994). The lack of records for the north may be a result of the difficulty in finding and identifying the species, and its tendency to stay within the forest canopy. It is likely found throughout northern Ontario to the tree line.

The Northern Long–eared Bat is a mid–sized bat with an average weight of 7.4 g, forearm length of 36.4 mm, and hind foot length of 9.4 mm with a slightly keeled calcar. The ears are quite long at 16.4 mm and will extend well past the end of the nose when bent forward. The fur is brown, similar to the Little Brown Bat, but is not glossy (van Zyll de Jong 1985).

The Northern Long–eared Bat is a forest dwelling species associated with woodlands and the Boreal Forest. It feeds over small ponds and streams, and within the forest canopy down to the shrub layer (Fitch and Shump 1979, van Zyll de Jong 1985). It can often be seen foraging throughout the canopy and shrub layer of the forest along narrow roads or walking trails (Dobbyn pers. obs.). It feeds on a variety of insects including Hemiptera, Lepidoptera, Hymenoptera, Diptera, and Homoptera, and may take a large number of its prey by gleaning them off leaves or twigs (van Zyll de Jong 1985).

Northern Long–eared Bats have been found roosting under the bark of trees but not often in buildings (van Zyll de Jong 1985). They hibernate in caves and mines in winter, choosing cooler parts of the hibernacula than Little Brown Bats (van Zyll de Jong 1985, Knowles 1992). They have been found in hibernacula from southern Ontario to as far north as a cave on the north shore of Lake Superior, approximately 130 km north–east of Duluth (Knowles 1992).

Little Brown Bat. *Myotis lucifugus* (Le Conte).
The Little Brown Bat is considered to be the most common bat in Canada and is found throughout the US and Canada north to the tree line (van Zyll de Jong 1985). It is common throughout Ontario north to Moose Factory and Favourable Lake (Dobbyn 1994).

It is a variably coloured bat, ranging from yellowish to dark–brown above and somewhat lighter or even grey below. The coat often has a glossy appearance. The average weight is 7.9 g, forearm length 37 mm, ear length 13.8 mm, and hind foot length 10 mm. The calcar is not keeled. (Fenton and Barclay 1980, van Zyll de Jong 1985).

The Little Brown Bat forages in a variety of habitats but has a strong preference for hunting over water. It chooses roost sites in buildings, trees, under rocks, or in wood piles and is the most common house bat in Canada (Fenton and Barclay 1980). The species is very gregarious and maternity colonies often become quite large. Hibernation takes place in caves and mines, and can begin as early as late September and continue until as late as mid–May (Fenton and Barclay 1980).

Little Brown Bats emerge relatively late in the evening and prey heavily on aquatic insects, which may be taken from the air or gleaned from the water's surface (van Zyll de Jong 1985). They are, however, very opportunistic and will adapt to feeding in a variety of circumstances. Chironomids constitute the largest portion of their diet (Belwood and Fenton 1976, Anthony and Kunz 1977), however, many other insects in the 3–10 mm size range are consumed including Diptera, Ephemeroptera, Trichoptera, Lepidoptera, Isoptera, Homoptera, and Coleoptera.

Eastern Pipistrelle. *Pipistrellus subflavus* (F. Cuvier).
The Eastern Pipistrelle occurs throughout the eastern United States and Central America (Fujita and Kunz 1984, van Zyll de Jong 1985). Within Ontario, it is found in the southern portion of the province along lakes Erie and Ontario and north to Renfrew. Two records, from Espanola and Alona Bay respectively, were made of individuals at hibernacula (Dobbyn 1994). One individual was found even further north at a hibernaculum in Minnesota, along the north shore of Lake Superior (Knowles 1992). This record was of a single Eastern Pipistrelle and whether any pipistrelles are resident in the area during the summer is not known. Living at the northern extreme of its range in Ontario, it is not common here (van Zyll de Jong 1985).

The Eastern Pipistrelle can be differentiated from other Ontario bats by the presence of tri–coloured hairs on its back (dark at the base, light–yellow to brown in the centre, and dark at the tips) which give the bat a yellowish or orangish–brown appearance. As well, the colour on its ventral side is similar to that on its back (Fujita and Kunz 1984, van Zyll de Jong 1985). It can also be identified by its unique, double harmonic echolocation call (MacDonald *et al* 1994). It is a medium sized bat, similar to the Little Brown Bat, with an average weight of 6.9 grams, forearm length of 33.7 mm, ear length of 12.5 mm, and hind foot length of 9.2 mm without a keeled calcar (van Zyll de Jong 1985).

Eastern Pipistrelles feed over water and along forest edges (LaVal *et al.* 1977, Fujita and Kunz 1984). Their diet consists of Coleoptera, Homoptera, Diptera, Hymenoptera and Lepidoptera, generally all within the 4–10 mm size class (Fujita and Kunz 1984). It is a slow erratic flyer that emerges relatively early compared to other species (Fujita and Kunz 1984, van Zyll de Jong 1985). The Eastern Pipistrelle hibernates in caves and mines.

Big Brown Bat. *Eptesicus fuscus* (Palisot de Beauvois).
The Big Brown Bat is one of Ontario's larger bats with an average weight of 17.9 g, forearm length of 47.4 mm, ear length of 16.1 mm, and hind foot length of 11.7 mm with a keeled calcar (van Zyll de Jong 1985). It has brown fur, darker above than below, and varies from light golden–brown to a dark, almost black–brown. It can be separated from all other Ontario bats by its brown fur and large size.

The Big Brown Bat is found throughout the US, Central America, and southern Canada (van Zyll de Jong 1985). In Ontario, it is found throughout the south and along the north shore of Lake Superior as far north as Kenora (Nagorsen 1980, Dobbyn 1994). Hibernation records have been made from as far north as Kenora. It occupies a variety of open

and forested habitats but tends to be less common in predominantly coniferous areas than deciduous areas (Kurta and Baker 1990).

The Big Brown Bat is a generalist, foraging in either wooded or open environments in both urban and rural settings (Kurta and Baker 1990). Foraging begins early after sunset and the prey taken is predominantly small Coleoptera (Freeman 1981, Kurta and Baker 1990). The Big Brown Bat uses both natural roosts such as hollow trees and rock crevices as well as man made structures such as attics and barns. Most maternity colonies in eastern North America are in man made structures such as barns, churches, or attics (Kurta and Baker 1990).

Big Brown Bats hibernate in caves, mines and occasionally buildings and can tolerate lower ambient temperatures during hibernation than other species. They enter hibernation relatively late in the fall compared to other species, and will occasionally venture from the hibernaculum during the winter (van Zyll de Jong 1985, Kurta and Baker 1990).

Silver–haired Bat. *Lasionycteris noctivigans,* (Le Conte).
The Silver–haired Bat is unmistakable. It has dark–brown to black fur with silvery–white tips which give it a frosted or silvery appearance (Kunz 1982). It is medium sized with an average weight of 11.0 g, forearm length of 41.9 mm, ear length of 15.8 mm, and hind foot length of 9.0 g (van Zyll de Jong 1985). It is found throughout the US and southern Canada north to James Bay and northern British Columbia (van Zyll de Jong 1985). In Ontario, it has been recorded most often in the south, but records from as far north as James Bay and Nipigon are not uncommon (Dobbyn 1994).

Silver–haired Bats prefer to forage in or near coniferous and/or mixed deciduous forests adjacent to bodies of water where they take a variety of insects including Lepidoptera, Homoptera, Diptera, Hemiptera, Hymenoptera, Coleoptera, and Neuroptera (Kunz 1982, van Zyll de Jong 1985). They emerge relatively late in the evening, particularly when Big Brown Bats are found in the same area. This is likely a result of competition between the two species which is settled by a later peak activity period for the Silver–haired Bat (Reith 1980). The Silver–haired Bat is a slow flying bat that makes erratic course changes with many twists and frequent short glides (Kunz 1982)

Sliver–haired Bats are migratory and leave Ontario each fall for the United States, generally to areas south of the 42nd parallel (van Zyll de Jong 1985). Some studies have shown that some Silver–haired Bats may hibernate further north, after a short migration, and are found in mines, caves, or hollow trees as far north as the 6.7 degree Celsius mean daily minimum January isotherm (Izor 1979, Kunz 1982).

Eastern Red Bat. *Lasiurus borealis,* (Muller).
The Red Bat is a colourful bat with brick–red to rusty–red fur washed with white above and slightly paler below. Males are generally more brightly coloured than females. The dorsal side of the uropatagium is densely furred, a trait found only in the Lasiurids. Its average weight is 12.5 g, forearm length 39.7 mm, ear length 11.4 mm, and hind foot length 8.1 mm with an indistinct keel on the calcar (Shump and Shump 1982a, van Zyll de Jong 1985).

Red Bats prefer to roost in open or sparsely forested areas where shade trees are present, and they roost almost exclusively in the terminal foliage of trees. They are found singly or in mother/young family units (van Zyll de Jong 1985). Foraging is more common in areas with cover than in open areas (Furlonger *et al.* 1987).

Red Bats are found throughout eastern North America and south to South America. In Ontario, they are found throughout the province north to James Bay but are most common in the lower Great Lakes region (Dobbyn 1994).

The Red Bat migrates south to the US each fall, leaving in late August or September. After migration it hibernates in trees, woodpecker holes or under bark; awaking on warmer days to feed (Fassler 1975, Shump and Shump 1982a, van Zyll de Jong 1985). Food includes Homoptera, Coleoptera, Hymenoptera, Diptera, and Lepidoptera. Red Bats emerge shortly after dusk, before Hoary Bats (Shump and Shump 1982a, van Zyll de Jong 1985). Red Bats are one of only a few bat species that will typically have more than two young, sometimes having as many as four or five (van Zyll de Jong 1985).

Hoary Bat. *Lasiurus cinereus,* (Palisot de Beauvois).
The Hoary Bat is the largest bat in Ontario with an average weight of 27.6 g, forearm length of 56 mm, ear length of 14.0 mm, and hind foot length of 10.8 mm with a narrow keel on the calcar. Its fur colour is made up of mixed dark-brownish and greyish hairs, tinged with white to produce a frosty or hoary effect. The uropatagium is densely furred, as with the Red Bat, and the ears are rounded with a black rim (Shump and Shump 1982b, van Zyll de Jong 1985).

The Hoary Bat is found throughout the US and southern Canada. In Ontario there have been records from as far north as James Bay and Lake of the Woods (van Zyll de Jong 1985, Dobbyn 1994). Beginning in mid-August, Hoary Bats migrate to the southern US or Mexico (van Zyll de Jong 1985), or hibernate in the northern US (Findley and Jones 1964, Shump and Shump 1982b). Hoary Bats are solitary animals, roosting in the terminal foliage of trees (van Zyll de Jong 1985).

The Hoary Bat relies almost entirely on moths for its diet, although a few other groups are also utilised, such as beetles. Feeding begins later in the evening, often after Red Bats have reached their peak feeding period (Freeman 1981, Shump and Shump 1982b, van Zyll de Jong 1985). Foraging takes place over water or land, but when foraging over land, Hoary Bats tend to stay close to forest edges (Furlonger *et al.* 1987). There has also been an observed tendency for Hoary Bats to feed around street lights (Fenton and Merriam 1983). ❁

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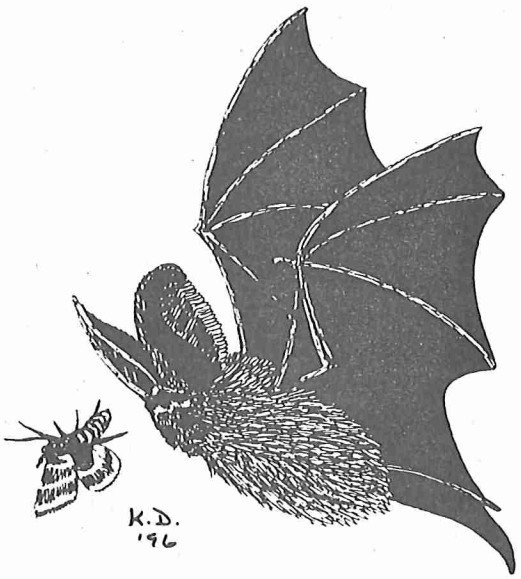


Noteworthy Bird Records

by Rob Dobos

Total species recorded during 1996 to January 31: **110**. For underlined species or dates a written documentation is required by the Hamilton Bird Records Committee. Capitalized species require documentation by the Ontario Bird Records Committee.

Observers: Jim Anderson (JA), Lorne Bennett (LB), Hazel Broker (HB), Barry Cherriere (BCh), Peter Coo (PC), Jim Cram (JC), Hugh Currie (HC), Robert Curry (RC), Rob Dawson (RDw), Rob Dobos (RD), Lois Evans (LE), Denys Gardiner (DG), Bob Henry (BHe), Jim Heslop (JH), Mark Jennings (MJ), Jan Klyve (JK), Manfred Kolster (MK), Ursula Kolster (UK), Marjorie Kraus (MKr), Bill Lamond (BL), Dennis Lewington (DL), Gwen Lewington (GL), Rick Ludkin (RL), Stuart Mackenzie (SM), Kevin McLaughlin (KM), Libor Michalak (LM), John Miles (JM), Matt Mills (MM), George Naylor (GN), Rose Petersen (RP), Brian Pomfret (BP), Alf Senior (AS), Bill Smith (BS), Ian Smith (IS), Mike Street (MS), Ron Valentine (RV), Kathryn Whittaker (KW), Brad Wilson (BrW), Many Observers (m.obs.).

Legend:
* –first occurrence for the year
F –first occurrence for the migration
L –last occurrence for the migration
HSA –Hamilton Study Area
max. –maximum # reported

Plumages,etc.:
m. –male
f. –female
ad. –adult
imm. –immature
juv. –juvenile
1st. win. –first winter
win. –wintering

Counties/Regions:
Brant [*BR*]
Haldimand–Norfolk [*HN*]
Halton [*HL*]
Hamilton–Wentworth [*HW*]
Niagara [*NG*]
Peel [*PL*]
Waterloo [*WT*]
Wellington [*WL*]

JANUARY 1996 (plus some December 1995 records)

Pied–billed Grebe: One on Hamilton Bay off LaSalle Marina [*HW*] Jan 1 (RD *et al.*).
Red–necked Grebe: Two on Lake Ontario off Sioux Lookout [*HL*] Jan 17 * (BS); one at Desjardins Canal, Dundas [*HW*] Jan 17*–31 (BHe;m.obs.); one at Hamilton Bay near Tollgate Ponds [*HW*] Jan 21 (KM).
Double–crested Cormorant: One at Desjardins Canal, Dundas Jan 1–21 (KM *et al.*); one at Windermere Basin [*HW*] Jan 1–21 (KM *et al.*).
Great Blue Heron: One at Taquanyah C.A. [*HN*] Jan 3 (JM).
Tundra Swan: Five at LaSalle Marina Jan 1 (RD *et al.*).
Trumpeter Swan: Eight (all wing tagged) off Venture Inn [*HL*] Jan 7 (RD *et al.*), and 10 there Jan 14 (DL,GL).
Whooper Swan: One escapee off Venture Inn Jan 14 (DL,GL).
Snow Goose: The resident ad. white morph at Desjardins Canal Jan 7 (KM *et al.*).
Green–winged Teal: One f. at Red Hill Creek mouth [*HW*] Jan 7 * (KM *et al.*).
Northern Pintail: 19 at Windermere Basin Jan 7 (KM *et al.*).
Northern Shoveler: Five at Windermere Basin Jan 7 (KM *et al.*).
Canvasback: Ten off LaSalle Marina Jan 1 (RD *et al.*).
Redhead: 85 off Fruitland Ave, Burlington [*HL*] Jan 18 (RD).
Ring–necked Duck: 20 off LaSalle Marina Jan 1 (RD *et al.*); eight at Windermere Basin Jan 7 (KM *et al.*).
TUFTED DUCK: One 1st win. m. off Appleby Line [*HL*] Jan 11 * (JM), and off Sioux Lookout Jan 20–22 at least (BS,DG,JC;RD).
Greater Scaup: About 10000 off Bronte Harbour [*HL*] Jan 28 (KM).
Lesser Scaup: 815 at Windermere Basin Jan 7 (KM *et al.*).
King Eider: Birds off Sioux Lookout: 3f. –Jan 16 * (*fide* HC); 1 1st win. m.,3f. –Jan 18 (RD); 4f. –Jan 20 (BS,DG,JC); two 1st win. m.,6f. –Jan 21 (KM).
Harlequin Duck: One f. off Shoreacres [*HL*] Jan 7 * (MS *et al.*).
Black Scoter: Two f. off Sioux Lookout Jan 18 (RD); two f. off Venture Inn Jan 21–22 (KM;RD).
Surf Scoter: A max. of 45 off Venture Inn Jan 22 (RD).

White-winged Scoter: One off LaSalle Marina Jan 1 (RD *et al.*); about 5000 off Burlington Lakeshore Jan 18 (RD).
Common Goldeneye: About 2500 off Burlington Lakeshore Jan 7 (DG *et al.*).
Bufflehead: About 450 off Burlington Lakeshore Jan 7 (RD *et al.*).
Hooded Merganser: One f. at Desjardins Canal Jan 1–7 (KM *et al.*); one f. at Spencer Smith Park [*HL*] Jan 7 (MS *et al.*); nine at Windermere Basin Jan 21 (KM).
Turkey Vulture: Birds at Oneida 4th Line E of Hwy 6 [*HN*]: 5 –Jan 5 * (BS,JC), 4ad.,4juv. –Jan 6 (BL,KM), 5 –Jan 30 (MS).
Bald Eagle: One ad. at N Shore Hamilton Bay [*HW*] Jan 1–16 (RD *et al.*); one imm. at Hamilton Bay Jan 2–16 (RD), and over Dundas [*HW*] Jan 26 (MM).
Sharp-shinned Hawk: 17 reports from throughout HSA during Jan (m.obs.).
Cooper's Hawk: 13 reports from throughout HSA during Jan (m.obs.).
Northern Goshawk: One juv. at Bronte Woods [*HL*] Jan 1–on (RC *et al.*); one ad. m. at Windermere Basin Jan 23 (RD).
Red-tailed Hawk: One dark morph *calurus* at QEW & Guelph Line [*HL*] Jan 1–28 at least (RC,RD,RDw); 70 at Oneida 4th Line E of Hwy 6 Jan 6 (BL,KM).
Merlin: One at Aberdeen Ave, Hamilton [*HW*] Dec 17 (RDw); two win. in Dundas Jan 1–on (JA); one f. at QEW & Appleby Line [*HL*] Jan 28 (RDw).
Peregrine Falcon: One reported at Upper James & Inverness Sts, Hamilton [*HW*] Jan 22 * (*fide* LM), and at Upper Sherman & Fennell Sts, Hamilton Jan 23 (AS).
Gyrfalcon: One imm. gray morph at Windermere Basin Jan 1*,20 (RC *et al.*;JH), and at Woodland Cemetery Jan 28 (RC); one ad. gray morph at Sioux Lookout Jan 20 (BS,DG,JC).
Ring-necked Pheasant: Three at Winona Jan 1 (DL,GL); one f. at Desjardins Canal Jan 26 (MM); two at Hwy 6 S of Safari Rd [*HW*] Jan 29 (RD).
American Coot: Five at Burlington Beach Canal [*HW*] Jan 1 (RD *et al.*); three at Spencer Smith Park Jan 6–28 (KM *et al.*); one at Red Hill Creek mouth Jan 7 (KM *et al.*); one at Bronte Harbour Jan 7 (RD *et al.*).
Bonaparte's Gull: Three ad. at Hamilton Bay Jan 1 (RD *et al.*); one off Winona [*HW*] Jan 7 (RC,JO).
Iceland Gull: One at Burlington Beach Canal Jan 1 (RD *et al.*).
Glaucous Gull: Eight at Hamilton Bay Jan 1 (RD *et al.*); one over Mountain Ave, Hamilton [*HW*] Jan 8 (RDw); two at Highland Rd & 1st Rd E, Saltfleet [*HW*] Jan 13 (DL,GL).
Barred Owl: A photograph of one labelled as a Short-eared Owl taken at Burlington Central High School [*HL*] Jan 22 * appeared in the Burlington Spectator.
Great Gray Owl: One at Bronte Woods Jan 1–14 at least (m.obs.); one photographed at MacPherson School & McLean School Rds [*BR*] Jan 9 (KW); one at Sideroad 25 & First Line, Milton [*HL*] Jan 28 (LB).
Long-eared Owl: One at Hendrie Valley (MJ) and one at English Rd E of Hwy 6 [*HW*] (RL) Dec 26; up to four at Bronte Woods Jan 1–on (m.obs.); one at a Hamilton Mountain yard Jan 7 (JK).
Short-eared Owl: 12 at Hagersville Junkyard [*HN*] early Jan (*fide* MS); three at Miles & Chippewa Rds, Glanbrook [*HW*] Jan 11 (RP,IS).
Northern Saw-whet Owl: Two at Bronte Woods Jan 7 * (MS,BS *et al.*) and one there Jan 11–31 (m.obs.); one window kill at St Ann's School, Ancaster [*HW*] Jan 30 (RP).
Red-bellied Woodpecker: One at Governors Rd C.A. [*HW*] (HB,LE) and two at Twenty Mile Creek E of Hwy 6 [*HW*] (RL) Dec 26; one at N Shore Cootes Paradise [*HW*] Jan 26 (MM).
Yellow-bellied Sapsucker: One at N Shore Cootes Paradise Jan 5 * (PC).
Pileated Woodpecker: One at Dunning Ct, Dundas [*HW*] Jan 1 (MM); one at Dundas Marsh Jan 13 (KM); one at N Shore Cootes Paradise Jan 26 (MM).
Eastern Phoebe: One reported at Erland Lee House Museum, Ridge Rd Saltfleet [*HW*] Jan 15 * (BrW).
Horned Lark: 20 at Oneida 3rd Line [*HN*] Jan 6 (BL,KM).
Tufted Titmouse: One at Mineral Springs [*HW*] Jan 1 (RP,IS); two at N Shore Cootes Paradise Jan 4–13 (DL,GL;MM); one at Fifty Point C.A. [*HW*] Jan 25 (SM).
Carolina Wren: One at Hatton Dr, Ancaster [*HW*] Jan 27–29 (RP,IS).
Eastern Bluebird: Two at Kings Forest [*HW*] (GN) and six at Slote & Mineral Springs Rds [*HW*] (HB,LE) Dec 26; two at Bronte Prov. Park [*HL*] Jan 14 (JA); 10 at Mineral Springs Rd E of Slote Rd Jan 21 (RD); four at N Shore Cootes Paradise Jan 26 (MM).

Hermit Thrush: One at Bronte Woods Jan 1 (RV).
American Robin: 12 at McMaster University [*HW*] Jan 3 (RDw).
Varied Thrush: One m. at 10 Dundee Dr, Stoney Creek [*HW*] Jan 1–31 (m.obs.).
Northern Shrike: One at Hopkins Tract [*HW*] Jan 1 (RD *et al.*); one at Oneida 2nd Line [*HN*] Jan 6 (BL,KM); one at Windermere Basin Jan 13 (KM); one at Meadows Rd, Cayuga [*HN*] Jan 20 (BL,KM); one at Hwy 6 Bypass, Caledonia [*HN*] and one at Jerseyville [*HW*] Jan 21 (RD); one at QEW N of Lakeshore Rd, Burlington [*HL*] Jan 22 (RD); one at Mackenzie Rd & Oneida Line 2 [*HN*] Jan 30 (MS).
Rufous–sided Towhee: One at Glenwood Dr, Aldershot [*HL*] Jan 1 (BS *et al.*).
SPOTTED TOWHEE: One imm. m. at 56 Thorndale Cres, Hamilton [*HW*] Dec 2–Jan 28 at least (UK,MK;m.obs.) was previously reported as a Rufous–sided Towhee but preceeded the following record as the first for the HSA; one imm. m. at Saw–whet Golf Course, Bronte Rd [*HL*] Jan 1–27 at least (m.obs.).
Field Sparrow: One at Dunning Ct, Dundas Jan 14 * (MM).
White–throated Sparrow: Three at Hatton Dr, Ancaster Jan 25 (RP).
White–crowned Sparrow: One near Brantford [*BR*] Dec 31 (BL,KM); one at Tollgate Ponds [*HW*] Jan 1 (RC *et al.*); one at Grimsby [*NG*] Jan 1 (MKr); one imm. at Dunning Ct, Dundas Jan 11 (MM); one at Book Rd, Ancaster [*HW*] Jan 28 (RP,IS).
Lapland Longspur: 12 at Flamborough Downs [*HW*] Dec 26 (JM); five at Jerseyville Rd W of Hwy 52 [*HW*] Jan 13 * (RC *et al.*).
Snow Bunting: 250 at Jerseyville Rd W of Hwy 52 Jan 13 (RC *et al.*).
Red–winged Blackbird: Six at Meadows Rd, Cayuga Jan 10*–15 (BS *et al.*).
Eastern Meadowlark: Six at N Shore Cootes Paradise Dec 26 (BP); five at Meadows Rd, Cayuga Jan 10*–15 (BS *et al.*).
Rusty Blackbird: 11 at Meadows Rd, Cayuga Jan 10*–15 (BS *et al.*).
Brown–headed Cowbird: Five at Ramsgate Dr, Stoney Creek [*HW*] Jan 27 (DL,GL).
Pine Grosbeak: 12 at Conc 6 E Flamborough [*HW*] and one at N Shore Cootes Paradise (RDw,BP) Dec 26; one at Dunning Ct, Dundas Jan 6 * (MM); five at Parkside High School, Dundas [*HW*] Jan 8 (MM); two at Barrie St, Dundas [*HW*] Jan 12 (MM).
Purple Finch: Two at Hatton Dr, Ancaster Jan 29 (RP).
Common Redpoll: Up to 50 at Hatton Dr, Ancaster Jan 1–31 (RP,IS); 30 at Venture Inn Jan 14 (BCh).
Hoary Redpoll: One m. at Hatton Dr, Ancaster Jan 1*–29 (MS;RP;m.obs.); two at Venture Inn Jan 14 (BCh).
Pine Siskin: Up to 33 at Hatton Dr, Ancaster Jan 1–31 (RP,IS); 40 at Glenwood Dr, Aldershot Jan 1 (RD *et al.*); 25 at Dunning Ct, Dundas Jan 25 (MM).

Other species recorded in HSA during January 1996: Mute Swan, Canada Goose, American Black Duck, Mallard, Gadwall, Oldsquaw, Common Merganser, Red–breasted Merganser, Rough–legged Hawk, American Kestrel, Ruffed Grouse, Ring–billed Gull, Herring Gull, Great Black–backed Gull, Rock Dove, Mourning Dove, Great Horned Owl, Eastern Screech–Owl, Belted Kingfisher, Downy Woodpecker, Hairy Woodpecker, Northern Flicker, Blue Jay, American Crow, Black–capped Chickadee, Red–breasted Nuthatch, White–breasted Nuthatch, Brown Creeper, Winter Wren, Golden–crowned Kinglet, Northern Mockingbird, Cedar Waxwing, European Starling, Northern Cardinal, American Tree Sparrow, Song Sparrow, Dark–eyed Junco, House Finch, American Goldfinch, House Sparrow.

Please send your bird records for February 1996 by March 10 to Rob Dobos at 178 Cedarbrae Ave, Waterloo, Ont., N2L 4S3; or phone (519) 888–0553 (eves); **or e–mail to: rob.dobos@cciw.ca**

HAMILTON BIRDING HOTLINE: 905–648–9537

Nature's Plan for Cavity Trees

by Jane Hannah

At this time of the year that old adage, 'Out with the old and in with the new' springs to mind, or at least it does with me! But, when it comes to cavity trees, this proverb should be put into the recesses of our minds because this particular stage in a trees life is a wonderful example of nature's way of recycling.

So what is a cavity tree, I hear you cry?! Well, it's a dead or dying tree with holes or cavities. You may have seen them while you were out on a walk or visiting someone's garden.

There are two sets of cavity dwellers, primary and secondary. Woodpeckers are the main primary cavity dwellers, the softer rotten or dying wood enables them to excavate holes. Chickadees and Red Breasted Nuthatches will often make alterations to a hole in order to suit their needs. Some birds such as Wood Ducks, Kestrels and owls cannot do this so they fall into the secondary category, along with mammals like Deer Mice, Squirrels and Raccoons, all of which make good use of these convenient cavities.

The location and size of the hole decides what functions it will be used for, because a hole is not just a hole to nature! Where there is decaying wood you will often find Carpenter ants or larvae of the Wood Boring beetle, this will lead to ragged, irregular shaped holes associated with feeding cavities. Relatively stable wood is sought out for nesting cavities, smooth edges and a regular shape are good indicators of such a hole. If you happen to see a series of holes down the length of a tree then it's very likely to be the work of a Pileated Woodpecker, who has created not only a hole to sleep in at night but also a number of emergency exits if he is trapped in the tree by a predator.

When a tree falls down, the patch of light left behind is enjoyed by the new vegetation in the area. The tree trunk decays further with the help of fungi, mosses and wood boring insects and is eventually absorbed whence it came, returning its nutrients to the soil. So, unless the tree is a danger to your property or other people, leave the chainsaw where it is and pick up this article instead. You'll see the tree in a 'hole' different light!

Revisions to the Hamilton Bird Checklist

by Rob Dobos

The Hamilton Bird Records Committee (HBRC) of the Hamilton Naturalists' Club has recently revised and updated the "Checklist of the Birds of the Hamilton Area". This checklist consists of the birds which have occurred within a circle of 25 mile (40.2 km) radius centred on Dundurn Castle, Hamilton, Ontario (referred to as the Hamilton Study Area [HSA]). The new checklist is expected to be reprinted later this year, and details on its availability will appear in the WOOD DUCK at a later date.

The bird checklist now officially stands at 372 species. Eight new species have been added to the list, which was last updated and printed in 1988. These include: American Swallow-tailed Kite, Ferruginous Hawk, California Gull, Rufous Hummingbird, Fork-tailed Flycatcher, Mountain Bluebird, Spotted Towhee, and Lark Bunting. Documentations for the occurrences of all these species (except Spotted Towhee — see below) have been accepted by the Ontario Bird Records Committee (OBRC) and the records appear in the annual reports of the OBRC published in *Ontario Birds*.

Documentations supporting the occurrence of Spotted Towhee have not yet been reviewed by the OBRC at the time of writing, however, two recent records this past winter (see "Noteworthy Bird Records" this issue) by many observers are certainly without doubt. Spotted Towhee was until recently considered the western race of the Rufous-sided Towhee. The American Ornithologists Union (AOU) decided in 1995 to split these races into two species (amongst other changes). However, they have not yet formally published these changes at this time, but the revised North America checklist will appear in an upcoming issue of the *Auk*. It seems prudent to adopt this change in our revised checklist at present to avoid having the list become out of date almost immediately after being printed.

One species was deleted from the previous list. In reviewing the list for revisions, the HBRC considered the inclusion of certain species based on

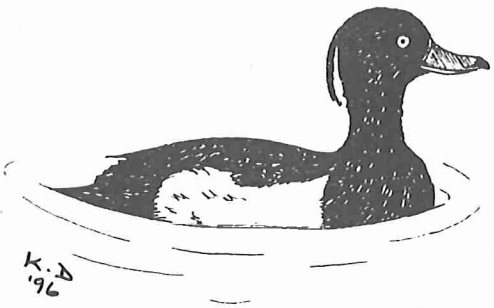
historical records for which no documentation exists. It was the opinion of the Committee that one of these species, Roseate Tern, should best be removed. The record is based on a sight observation in 1942 by the late George North. This species is not included on the official bird checklist for Ontario. By deleting this species from the Hamilton list, the HBRC is not suggesting that North's sighting was incorrect. The intention is to conform to the provincial list, in light of the lack of any documentation for this record of a species which, admittedly, poses some identification problems.

Revisions were also made to the checklist based on official changes to the common names of several species by the AOU since 1988. The approach to the indication of breeding status on the checklist was also changed. The new list will indicate all species which have historically been confirmed as breeders in the checklist area, as opposed to an indication of the current breeding status used in the 1988 list. It was decided that the current status of each species, including breeding status, would best be indicated on a revised "Date Guide to the Birds of the Hamilton Area", hopefully to be updated later in 1996.

The members of the Hamilton Bird Records Committee are: Robert Curry, Robert Dobos (Secretary), Mark Jennings, William Lamond (ex officio) and Kevin McLaughlin.

Future Additions to the Bird Checklist?

The Hamilton bird checklist has grown in recent years by about one new species per year. At 372 species, it is one of the highest regional lists (if not the highest) in Ontario. However, with a provincial bird checklist of over 460, it seems that there are many possibilities for future new species to be found in the Hamilton Study Area.



predict which new species will be added to the list in the next five to ten years? I would ask interested HNC members to submit their list (up to three species) which they predict will be added to the Hamilton bird checklist in the near future. I will compile a list based on submissions received for publication in a future issue of the WOOD DUCK. Then perhaps we can revisit this list the next time the checklist needs updating to see how good fortune tellers we are!

Send your list to Rob Dobos at 178 Cedarbrae Ave., Waterloo, Ontario, N2L 4S3 by March 31, 1996; or call Rob at (519) 888–0553, or e–mail them to: rob.dobos@cciw.ca (Serious entries only, please. No penguins, ostriches, birds–of–paradise, etc.!)

Personal Hamilton Area Bird Lists

Many birders and members of the HNC keep personal lists of the birds that they have recorded within certain areas, be it a life list, Canada list, Ontario list, yard list, or other local list, including a Hamilton Study Area list. The American Birding Association publishes lists of birders' such lists, but many HNC members are not necessarily ABA members or do not submit their list totals.

Again, just for fun, I would like to compile a list of HNC members' Hamilton bird list totals to print in an upcoming issue of the WOOD DUCK. This list could be updated on an annual basis. It might be fun to see how you stack up against some of the long time and more active local birders, or to see if you are ahead of your birding buddies or spouse!

The criteria for reporting totals will be simple:

1. They must include birds positively identified by you by sight or sound. (Be honest with yourself — your lists will not be checked.)
2. They must include birds encountered in the Hamilton Study Area.
3. They must be species included on the official Hamilton Area Bird Checklist (1996 revision). No exotic escapees or introduced birds (e.g. Trumpeter Swan, Bobwhite).
4. Include your totals up to December 31, 1995 only.
5. The threshold for reporting will be 225 species (or roughly 60 % of the checklist total).

Send your Hamilton list totals along with your name and address to Rob Dobos by March 30, 1996, at the address/phone/e–mail listed above.

Observations of Ring–billed Gulls Feeding in an Urban Setting

By John Struger
and
Benjamin Paquette–Struger

Usually when people discuss the Ring–billed Gull (*Larus delawarensis)* there is little mention of this species's ornithological, ecological, or economic significance. Quite the contrary, there is usually a heated exchange about their detrimental effects. The senior author was first exposed to the world of colonial nesting birds in 1980, and even though the Ring–billed Gull has many nicknames which are unmentionable in a journal such as the Wood Duck, their behaviour continues to attract and intrigue.

On June 23, 1995 at approximately 2030 hr, while the authors were playing baseball in the school yard of A.M. Cunningham School (in the east–end of Hamilton), we observed 50 adult Ring–billed Gulls actively feeding on beetles in the air and on the ground. It was a very warm night with little wind and clear skies. There were approximately 25 gulls hawking beetles on the wing and 25 more actively searching for them in the turf. The feeding activity seemed to intensify from 2030, and persisted to well after 2130, when it was getting quite dark. We believe that the insects were either European Chafer sp. *(Amphimallon majalis)* and/or Japanese Beetles sp. *(Popillia japonica)*, which are common lawn beetle pests. The beetles were highly visible as they flew over shrubs and small trees along the fence of the schoolyard, where the gulls were actively hawking. These birds likely originated from the colony located in Hamilton Harbour, along Eastport Drive, only several kilometres away. From the number of beetles that we observed flying, and the activity of the gulls in the air, and on the ground, it appeared that the adults were able to collect a plentiful (and probably quite nutritious) late–day snack for their young.

The diet of the Ring–billed Gull in Ontario has been reviewed by Blokpoel and Tessier (1986). They described an omnivorous diet which included such food items as fish, insects, earthworms, handouts, garbage, and fruits such as tomatoes, strawberries, and blueberries. In addition, Blokpoel and Struger (1988) documented the widespread feeding of Ring–billed Gulls on cherries from orchards in the Hamilton and Niagara areas. As far as we could tell, there is not much in the literature on beetles being a food source for Ring–billed Gulls. Buckley and McCarthy (1994), reported however, that adult Laughing Gulls *(Larus atricilla)* fed on similar beetle species at the same time of the year (ie. during nesting season), in the grassy areas between runways at Kennedy International Airport. We have also observed Robins *(Turdus migratorius)* feeding on the same type of beetles in the air on our street, until it was almost totally dark.

So the next time someone describes a Ring–billed Gull in vain...remember that this species has done well because of its opportunistic feeding habits, which are directly related to our activities. They are good for the environment because they prey on insects such as the Japanese beetle and European Chafer, which might otherwise be controlled with lawn insecticides in some areas.

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Starlings and White Grubs

by Dennis Lewington

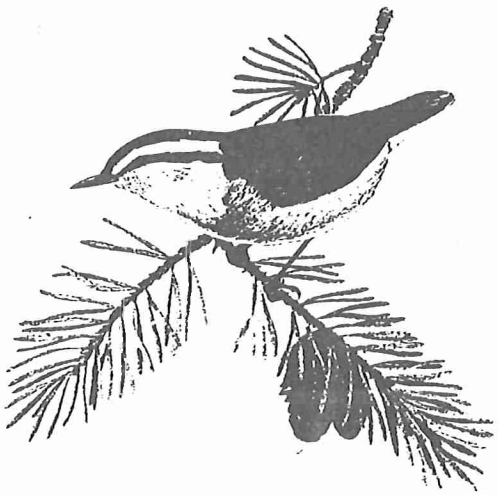
November 24, 1993 was a rainy day, as I watched approximately 36 Starlings feed on our back lawn.

Curious as to why the birds were drilling into the ground with their beaks, I kept watching. Time and time again, they would bring up a white grub. I was amazed at the number of white grubs in our lawn.

Starlings may not be the most attractive bird, but this day they were reducing the grub population in our lawn.

Calling All Club Members!

Have you observed interesting behaviour by birds, mammals, or insects? Would you be willing to share these observations with other Club members through the WOOD DUCK? The anecdotes need not be backed up with extensive research and a bibliography, although you may do so if you wish. What I'm looking for are short descriptions of amusing, interesting, unusual observations you have made of our natural world. Please write a short account, 100–300 words, describing your observation and send it to ***Jean Stollard, 7–457 Woodview Rd., Burlington, ON L7N 2Z9.***



Spot the Ladybug!

The Canadian Nature Federation (CNF) is looking for Canadian naturalists to help spot ladybugs in their backyards, in their gardens, and while on vacation next summer. There are more than 500 different species of ladybugs in North America, however some of these species have been introduced into the United States from overseas to control aphids in orange groves. These introduced species are fierce competitors and are expanding their range across Canada. There is not enough research available to determine what effect this influx of alien species is having on our native populations of lady beetles.

CNF is recruiting volunteers nationwide to identify lady beetle species they find locally. We have chosen thirteen of the more common lady beetle species, including two introduced species, and produced an identification kit which includes species illustrations, identification tips and natural history information about lady beetles. Our goal is to have individuals identify the species that they find and send in a reporting form outlining the species and where it was found.

The project is part of the Endangered Plants and Invertebrates Program (EPIC). Existing conservation plans concentrate on more visible animals and higher plants, however these species account for less than 10% of the species in Canada. EPIC attempts to protect the remaining 90% including insects, non–vascular plants, fungi, and algae. This program, partially funded by Science Culture Canada, attempts to inform people of importance that EPIC species play in natural systems.

For people with World Wide Web access via computer, the lady beetle survey can be found at: **http://schoolnet2.carleton.ca/english/math_sci/env_geol/ladybug/**

To receive a copy of the species illustrations with identifying tips, please call 613–562–3447, fax 613–562–3447, send email to epiccnf@web.apc.org or write to: **Scott Plunkett, Canadian Nature Federation, 1 Nicholas St. Suite 520, Ottawa, ON K1N 7B7.**

Did You Know?

The best way to prevent passing on a disease to the birds at your feeder is to clean it often. We recommend cleaning your feeder regularly. After brushing, rinse it in a solution of 9 parts water to 1 part household bleach. Rinse it again in clear water, allow it to dry, and fill it with fresh seed. Then put it out for the birds. The birds will appreciate your care and concern. Attention to the ease of cleaning should also be a factor in purchasing new feeders.

Bird Watchers Digest
Re–printed from 'The Curlew' Vol XL No 8, November 1995

MONTHLY MEETINGS

Monday, March 11 8:00 p.m.

Location: RBG Centre
680 Plains Rd. West
Burlington

The Red Hill Valley

Bruce Duncan

Discover one of Mother Nature's most beautiful areas, right on our own doorstep!

Please remember to bring your own cup to the meeting as there are only a few cups available.

Next Month

Wild Things — The Hidden World of Animals
Michael Runtz

Monday, March 18, 7:30 p.m.

Bird Study Group

Location: RBG Nature Centre,
Old Guelph Road,
Dundas

This is an informal but interesting meeting featuring a discussion of recent bird sightings, an identification session and a workshop, film or set of slides about some aspect of birds. If you're a beginner birdwatcher, come out to learn more about birds. If you're an expert birder, come out to share your knowledge and enthusiasm. This month will feature: **– Glenn Coady: Birds of Churchill, Manitoba**

Organizer: Bruce Duncan 519-622-4709

Saturday, March 30 10:30–1:30

Junior Naturalists' Club

Location: Mountsberg Wildlife Centre
Campbellville, ON

Mountsberg Maple Magic

Tour the maple bush, enjoy a pancake lunch and watch a raptor show. There is a small additional charge for this outing. Please call Roslynne for details.

Please note: these activities are limited to Junior Naturalists' Club members. Meetings are held monthly and led by enthusiastic, knowledgeable, volunteer members of the HNC. If your children would like to have fun while learning about nature, please call **Roslynne** for details on how they can join the Club.

Organizer: Roslynne Price 681–2276

Sunday March 31 9:00 a.m.

Plant Study Group

Location: Lyn Hanna–Folkes
478 Hwy 53 East
Ancaster

The Plant Study Group is an informal meeting of those interested in plants and who wish to share ideas and learn more about this fascinating aspect of the natural world. Whether a beginner or a seasoned botanist, come out and enjoy the lively discussions. This month will feature:

– Discussion of Scout House Rehabilitation Project – Field Trip (weather permitting). Anyone who was involved with the Scout House project when it began (1989-90?), please come out to share your knowledge about the site with us. Thanks.

Organizer: Lyn Hanna-Folkes 648-1945

UPCOMING EVENTS

March 1 to May 15
Niagara Peninsula Hawkwatch
This is conducted at Beamer Memorial Conservation Area on Ridge Rd. Above the escarpment in Grimsby. It is one of the best spring viewing spots for migrant hawks in Ontario. Counters are on hand daily. The better days are when winds are southerly. No guarantees.
Contact: Mike Street 648–3737

Friday April 5, 10:00 a.m.
Come Home to Red Hill
Contact: Don McLean 664–8796

Sunday April 28, 2:00 p.m.
Red Hill Spring
Leader: Bruce Duncan 519–622–4709

The February WOOD DUCK was assembled and mailed by:

Norm Pomfret
Marge and Norm Ralston
Doris Rundle
Maria Sedgwick
Jim and Jean Stollard
Phyllis Vair

Thanks everyone!

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Don McLean 664-8796
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HAMILTON NATURALISTS' CLUB

Membership Fees 1995-96

Life Member	$350.00
Active Member	20.00
Active Senior Member	17.00
Joint Members	30.00
Joint Senior Members	25.00
Family Membership	35.00
Student Member	10.00
Corresponding Member	15.00
Junior Nats - first child	30.00
Junior Nats - additional children	20.00
Honorary Life Member	None

HNC Publications

Natural Areas Inventory Vols I & II	*$60.00*
Herpetofaunal Atlas	*20.00*
Checklist of Birds of H-W	*1.00*
Date Guide to Birds of H-W	*1.00*
Citizens Guide to Action	*Free*
Naturally Hamilton: A Guide to Green Spaces of Hamilton-Wentworth	*Free*

The Wood Duck

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The HNC promotes public interest in the study, conservation and appreciation of our natural heritage. Meetings are held monthly Sept-May inclusive and field events are scheduled throughout the year. The Hamilton Naturalists' Club is a registered charity and all donations above the regular membership fee are tax deductible.

Send noteworthy bird records to: **Rob Dobos, 178 Cedarbrae Ave. Waterloo, ON N2S 4L3. Hamilton Birding Hotline: 648-9537**

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